

What is claimed is:

1. A coating material dispensing system including a coating dispenser, a high-magnitude potential supply to provide charge to the dispenser, supply valves having respective input ports, respective output ports, and respective control ports, a first purge valve having an input port, an output port and a control port, a conduit coupling the output port of a first one of the supply valves to a common point in a fluid circuit, a conduit coupling the output port of a second one of the supply valves to the common point, a conduit coupling the output port of the first purge valve to the common point, and a conduit coupling the common point to the coating dispenser to provide fluid from one of: the output port of said first one of the supply valves; the output port of said second one of the supply valves; and the output port of the first purge valve, to the coating dispenser, the common point coupled to ground.

2. The apparatus of claim 1 wherein the circuit includes two manifolds, each including a valve for each different type of coating material to be dispensed through that respective manifold, each manifold including an output port coupled to an input port of a respective one of the supply valves.

3. The apparatus of claim 1 wherein the circuit includes second purge valves having respective input ports, respective output ports, and respective control ports, a container for receiving fluid purged from the circuit, the circuit including two manifolds, each including a valve for each different type of coating material to be dispensed through that respective manifold, each manifold including an output port coupled to an input port of a respective one of the second purge valves, an output port of each of the second purge valves being coupled to the container for receiving fluid purged from the circuit.

4. A coating material dispensing system including a coating dispenser having a terminal for coupling to a high-magnitude potential supply for providing electrical charge to the coating material as the coating material is dispensed by the dispenser, supply valves having respective input ports, respective output ports, and respective control ports, first purge valves having respective input ports, respective output ports, and respective control ports, a second purge valve having an input port, an output port and a control port, and means for coupling: the output port of a first one of the supply valves to a common point in a fluid circuit; the output port of a second one of the supply valves to the common point; the output port of the second purge valve to the common point; and, the common point to the coating dispenser, the common point also coupled to ground.

5. The apparatus of claim 4 wherein the means for coupling: the output port of a first one of the supply valves to a common point in the circuit; the output port of a second one of the supply valves to the common point; the output port of the second purge valve to the common point; and, for coupling the common point to the coating dispenser comprises: a conduit for coupling the output port of the first one of the supply valves to the common point in the circuit; a conduit for coupling the output port of the second one of the supply valves to the common point; a conduit for coupling the output port of the second purge valve to the common point; and, a conduit for coupling the common point to the coating dispenser.

6. The apparatus of claim 4 wherein the circuit includes two manifolds, each including a valve for each different type of coating material to be dispensed through that respective manifold, each manifold including an output port coupled to an input port of a respective one of the supply valves.

7. The apparatus of claim 4 wherein the circuit includes a container for receiving fluid purged from the circuit, the circuit including two manifolds, each including a valve for each different type of coating material to be dispensed through that respective manifold, each manifold including an output port coupled to an input port of a respective one of the first purge valves, an output port of each of the purge valves being coupled to the container for receiving fluid purged from the circuit.

8. A method for dispensing coating material, the method including providing a coating dispenser, coupling the coating dispenser to a high-magnitude potential supply to provide charge to the dispenser, providing supply valves having respective input ports, respective output ports, and respective control ports, providing first purge valves having respective input ports, respective output ports, and respective control ports, providing a second purge valve having an input port, an output port and a control port, and coupling: the output port of a first one of the supply valves to a common point in a fluid circuit; the output port of a second one of the supply valves to the common point; the output port of the second purge valve to the common point; and, the common point to the coating dispenser, and coupling the common point to ground.